

Diagram illustrating the location of a power pole relative to the Right-of-Way (R/W) Line and Private Property.

The diagram shows a cross-section of the R/W Line and Private Property. The R/W Line is indicated by a dashed line. The Private Property is indicated by a solid line. The distance from the R/W Line to the Private Property is labeled as 4'.

The power pole is shown within a circle, indicating its location. The distance from the R/W Line to the pole is labeled as 2' TO 4'.

The pole is shown with a transformer and a power line. The distance from the pole to the Private Property is labeled as VARIABLE.

Labels include: PRIVATE PROPERTY, STATE PROPERTY, R/W LINE, 4', 2' TO 4', VARIABLE, and RISE UTIL HARDW.

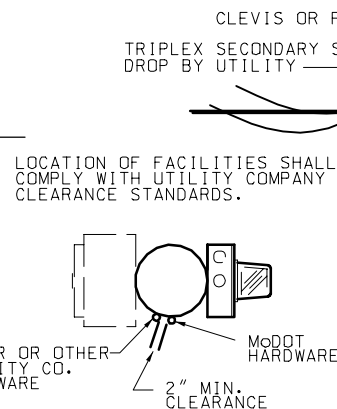
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LIST OF MATERIALS	
ITEM	DESCRIPTION
1	SERVICE POLE 30' MIN., CLASS IV WOOD, CONTRACTOR PROVIDED, MoDOT OWNED *
2	#8 AWG MIN. CABLE, 600 VOLT *
3	SERVICE ENTRANCE HEAD
4	GUY CABLE, AS REQUIRED
5	2" MIN. RIGID CONDUIT WITH PREFORMED ELBOWS
6	LIGHTNING ARRESTOR, VALVE TYPE, 2 POLE, 650 VOLT
7	METER SOCKET, 200 AMP, FOR SIGNALS
8	2" MIN. RIGID CONDUIT
9	SERVICE DISCONNECT BOX, LOCKING, RAIN TIGHT, NEMA 4
10	INSULATED, GROUNDABLE NEUTRAL, 200 AMP MINIMUM
11	SIGNAL BREAKER, SINGLE POLE, 40A MIN, TYPE A OR B *
12	LIGHTING BREAKER, SINGLE POLE, 40A, TYPE A OR B
13	METAL CONDUIT, 1/2"
14	GROUND WIRE, #2 AWG MIN.
15	GROUND ROD, 3/4" x 8' MIN.
16	#8 AWG MIN. CABLE, 600 VOLT
17	CLASS B CONCRETE, 0.92 C.Y. ±
18	THREADED CONDUIT HUB WITH SEALING WASHERS
19	LIGHTING CABLES *
20	WEATHERPROOF ADHESIVE LABEL (SIGNALS) VINYL RAISED LETTERING
21	TYPE B CONTROLLER AND SIGNAL BREAKER, AS SPECIFIED.
22	TYPE B AUXILIARY BREAKER, 15 AMP
23	W6 x 9 OR W6 x 15 GALVANIZED POST
24	LIGHTING CONTROL CABINET (SEE SHEET 2)
25	#2 AWG MIN. CABLE, 600 VOLT
*	SEE PLANS

- (A) SERVICE POLE SHALL BE GUYED WHEN SPAN OF OVERHEAD SERVICE WIRE EXCEEDS 50'.
- (B) INCREASE 1 FOOT FOR EACH 5 FEET ABOVE 50 FEET.
- (C) SERVICE DISCONNECT BOXES AND METER BOXES SHALL BE ALUMINUM OR STAINLESS STEEL, ALL HARDWARE, HINGES, CATCHES, ETC. SHALL BE STAINLESS STEEL. METER SOCKET AND OTHER EQUIPMENT AND MATERIALS SHALL BE U.L. APPROVED, AND CONFORM TO THE REQUIREMENTS OF THE UTILITY COMPANY OR MUNICIPALITY PROVIDING POWER.
- (D) SCHEMATIC DIAGRAM SHALL BE MOUNTED ON INSIDE OF DOOR.
- (E) UTILITY COMPANY SHALL DECIDE IF LIGHTNING ARRESTERS ARE TO BE CONNECTED ON THE LOAD OR LAINE SIDE OF THE METER. THE UTILITY COMPANY SHALL ALSO DECIDE IF THE LIGHTNING ARRESTER IS TERMINATED IN THE METER OR DISCONNECT CABINET, IF TERMINATED IN THE DISCONNECT CABINET, IT SHALL BE INSTALLED ON THE CONNECT CABINET.
- (F) IF LIGHTING IS SPECIFIED, INSTALL LIGHTING CONTROL ON POWER SUPPLY.
- (G) BREAKERS SHALL CONFORM TO SEC. 901.4 OF THE STANDARD SPECIFICATIONS.
- (H) IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL OR BURIED IN A TRENCH AT LEAST 30 IN. DEEP. CONNECTION TO GROUND ROD SHALL BE CADWELDED.

FOR CABLE TYPES AND INSTALLATION, SEE STANDARD SPECIFICATIONS.

THE TYPE POWER SUPPLY ASSEMBLY IS SHOWN ON THE PLANS OR IS DESIGNATED IN THE CONTRACT.

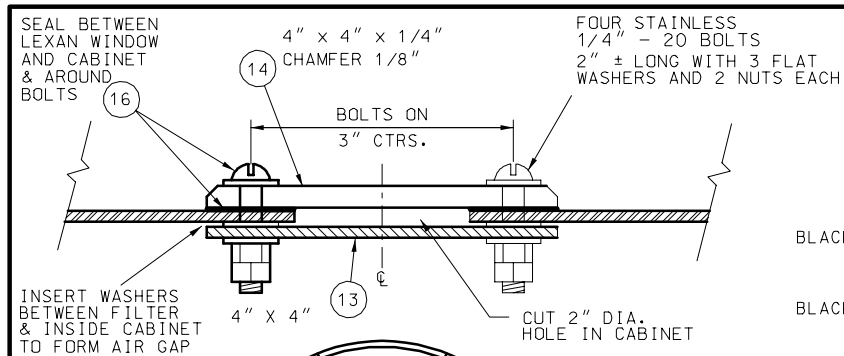
THE UTILITY COMPANY SHALL BE NOTIFIED IN WRITING 30 DAYS PRIOR TO DATE SERVICE WILL BE REQUIRED.

WHERE SIGNAL OR LIGHTING POWER ONLY IS DESIGNATED, OMIT ITEMS NOT REQUIRED.

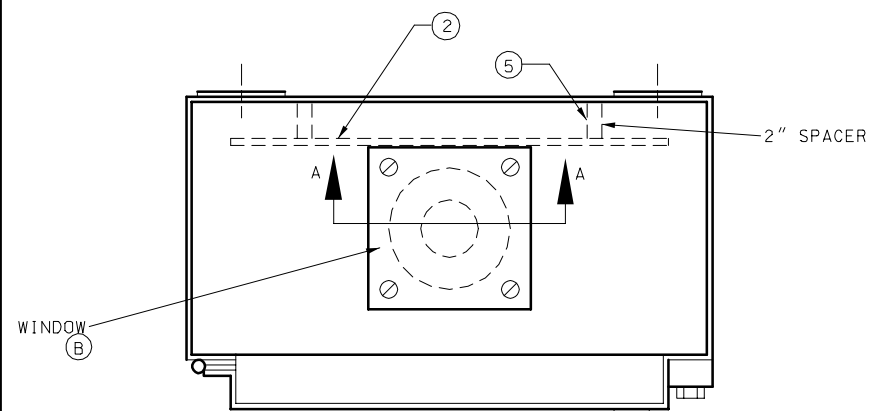
ALL OPENINGS IN ANY SERVICE BOX OR METER BOX SHALL BE COVERED AND SEALED WITH LIFETIME SILICONE CAULK.

ALL MATERIALS REQUIRED EXCLUDING REFERENCE ITEMS AS SHOWN ON DRAWING SHALL BE INCLUDED IN PRICE BID FOR POWER SUPPLY ASSEMBLY.

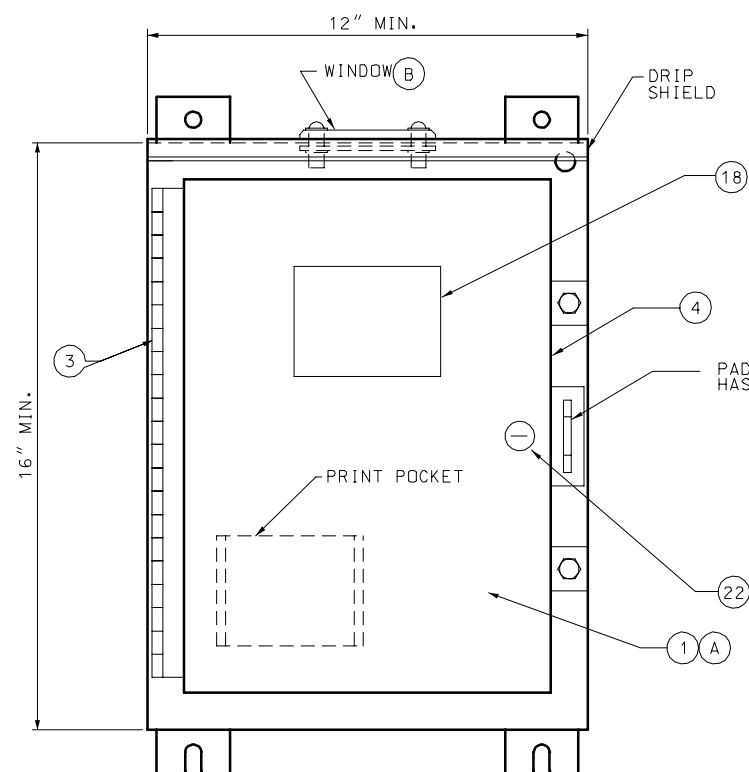
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
	TRAFFIC SIGNALS POWER SUPPLY ASSEMBLY 240/120 VOLT SERVICE		
DATE: _____	EFFECTIVE: 07-01-2004	902.15K	1 2



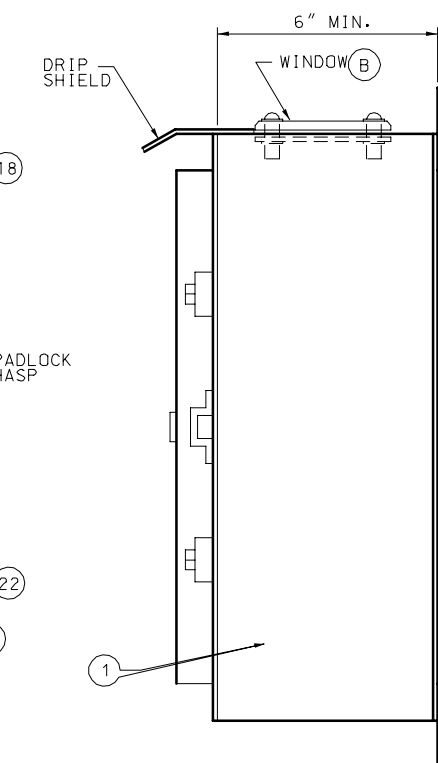
SECTION A-A
WINDOW DETAIL



TOP VIEW



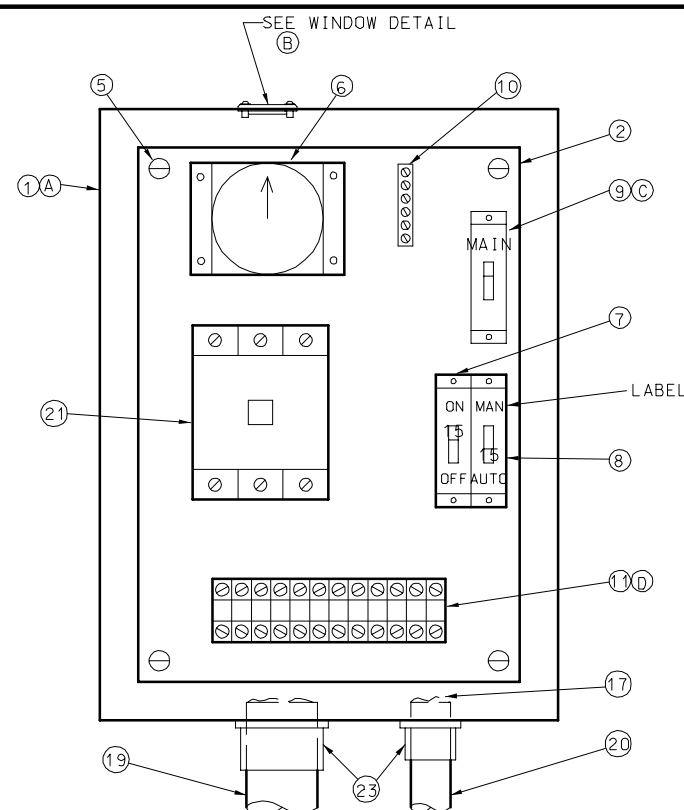
FRONT VIEW



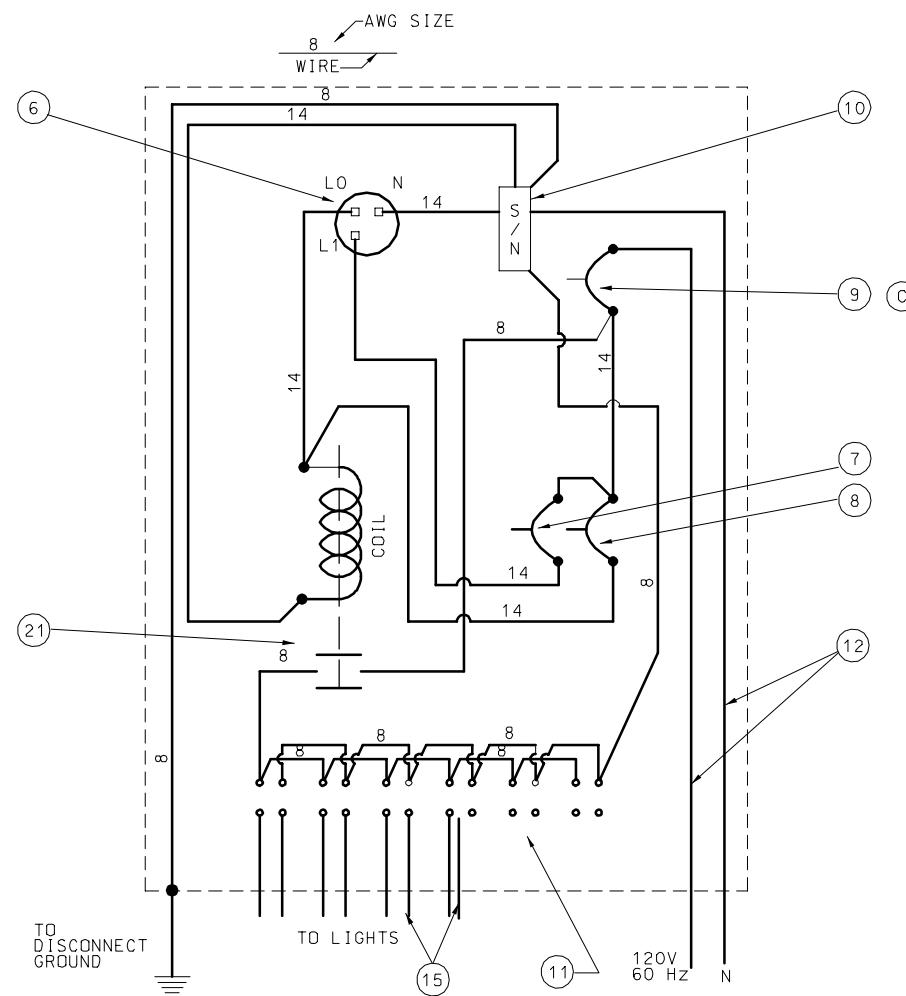
SIDE VIEW



LABEL DETAIL



EQUIPMENT LAYOUT



WIRING DIAGRAM

LIST OF MATERIALS	
ITEM	DESCRIPTION
1	CABINET, WATERTIGHT, NEMA 4, 14 GA MINIMUM THICKNESS
2	PANEL, 12 GA MINIMUM THICKNESS, ALUMINUM OR STAINLESS STEEL
3	CONTINUOUS STAINLESS STEEL HINGE
4	NEOPRENE GASKET DOOR
5	3/8" - 16 COLLAR STUD
6	PHOTOELECTRIC SWITCH AND SOCKET, 105/285 V., 1000 WATT
7	15 AMP CONTROL BREAKER, SINGLE POLE, TYPE B
8	15 AMP AUTO-MANUAL SWITCH, SINGLE POLE BREAKER, TYPE B, WITH LABEL
9	MAIN BREAKER, SINGLE POLE, TYPE B *
10	NEUTRAL TERMINAL STRIP
11	LIGHTING TERMINAL BLOCK, INSULATED FROM BACK PANEL, 12 POSITION
12	POWER, CABLE, #8 AWG MIN., 600 V.
13	FILTER, TRANSLUCENT, PLEXIGLASS #W2067, 1 8" THICK
14	CLEAR, LEXAN #9034 WINDOW, 1/4" THICK MIN. EXCEPT FOR 15A BREAKER; MIN. WIRE SIZE 10 AWG.
15	CABLE, LIGHTING *
16	LIFETIME SILICONE CAULK
17	PLIABLE DUCT SEALANT
18	LABEL-WEATHERPROOF ADHESIVE-VINYL RAISED LETTERING (OR EQUIV.) (SEE DETAIL)
19	CONDUIT, RIGID, 2" MIN. *
20	CONDUIT, RIGID, 1" MIN.
21	LIGHTING CONTACTOR, 2 POLE, 30 AMP, 600 VOLT, 120 VOLT COIL
22	#2 CORBIN LOCK
23	THREADED CONDUIT HUB WITH SEALING WASHERS
*	SEE PLANS

NOTES

- (A) SCHEMATIC DIAGRAM SHALL BE MOUNTED ON INSIDE OF CABINET DOOR.
- (B) PHOTOELECTRIC SWITCH BRACKETS MAY VARY. LOCATE CENTER OF WINDOW OVER CENTER OF PHOTOELECTRIC SWITCH.
- (C) MAIN BREAKER SIZE:
- | TOTAL LUMINAIRE**
LOAD (WATTS) | BREAKER SIZE
(AMPS) | MIN. AWG |
|-----------------------------------|------------------------|----------|
| 0-920 | 15 | 10 |
| 930-1260 | 20 | 8 |
| 1270-1600 | 25 | 8 |
| 1610-1930 | 30 | 8 |
- ** EXCLUDING BALLAST LOAD
- (D) TERMINAL BLOCK SHALL BE RATED AT 600V, SHALL ACCEPT WIRES UP TO 8 AWG AND SHALL HAVE A BARRIER BETWEEN EACH TERMINAL AND ON EACH END.

GENERAL NOTES:

ALL OPENINGS IN CABINET SHALL BE COVERED AND SEALED WITH LIFETIME SILICONE CAULK.

ALL CIRCUIT BREAKERS SHALL CONFORM TO SECTION 901.4 OF THE STANDARD SPECIFICATIONS.

PLACEMENT OF ALL ITEMS SHALL BE APPROVED BY THE ENGINEER.

CABINET SHALL BE LOCATED AWAY FROM TRAFFIC. TOP MOUNT PHOTO CONTROL SHALL FACE AN OPEN SKY. SIDE MOUNT PHOTO CONTROL SHALL FACE NORTH.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
TRAFFIC SIGNALS POWER SUPPLY ASSEMBLY 240/120 VOLT SERVICE			
DATE: _____	EFFECTIVE: 07-01-2004	902.15K	2/2